

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 .Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,950	06/20/2003	Ronald Miles Johnson	9D-HL-20170	9485
John S. Beulick Armstrong Teasdale LLP One Metroplitan Sq., Suite 2600 St. Louis, MO 63102			EXAMINER	
			STINSON, FRANKIE L	
			ART UNIT	PAPER NUMBER
St. Louis, MO			1746	
				*
			MAIL DATE	DELIVERY MODE
		•	06/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
*	10/600,950	JOHNSON, RONALD MILES				
Office Action Summary	Examiner	Art Unit				
A .	FRANKIE L. STINSON	1746				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	I. ely filed the mailing date of this communication. O (35 U.S.C. § 133).				
Status	<i>,</i> , ,					
 Responsive to communication(s) filed on <u>23 April 2007</u>. This action is FINAL. 2b) This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213. 						
Disposition of Claims						
4) Claim(s) 1-16 is/are pending in the application. 4a) Of the above claim(s) 13-16 is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) 1-12 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or Application Papers 9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the or Replacement drawing sheet(s) including the correction in the order of the or	r. epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te				

Art Unit: 1746

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Japan'195 (Japan 4-325195) or Korean'082 (Korean 2001098082) in view of either Richmond et al. (U. S. Pat. No. 5,873,518) or Quandt et al. (U. S. Pat. No. 5,439,019).

Re claims 1 and 6, Japan'195 and Korean'082 are each discloses a washing machine comprising:

a tub (not shown in either Japan'195 or Korean'082, however typical);
a cold-water valve (see abstract) for controlling flow of cold water to said
tub;

a hot water valve (see abstract) for controlling flow of hot water to said tub; a sensor (see abstract) positioned to sense a full fill level in said tub and configured to generate a full fill signal when the tub is full;

a sensor (see abstract) positioned to sense an intermediate fill level, the intermediate fill level less than full and corresponding to an adjustment level (see "slightly lower water level" in Korean'082 and "lower water level "in Japan'195) in said tub, said sensor configured to generate an intermediate fill signal when the intermediate fill level is reached; and

Art Unit: 1746

a controller ("control unit" in Korean'082 and fig. 7 in Japan'195) operatively coupled to said sensor and said hot and cold water valves, said controller operable to control said valves based on the fill signals from said sensor to control a wash water temperature that differs from the claims only in the recitation of the sensor being a pressure sensor and there being an independent first and second pressure sensors. The patents to Richmond (col. 5, lines 16-31) and Quandt (col. 7, line 41, thru col. 8, line 28) are cited disclosing that it is old and well known to employ a pressure type level sensor for measuring the height/volume of water in a washtub as well as the sensors being independent with the same controller the temperature of the water. It therefore would have been obvious to one having ordinary skill in the art to modify the device of either Japan'195 or Korean'082, to be of the pressure type as taught by either Richmond or Quandt, since this is considered to be a substitution of equivalents (see MPEP 2144.06 SUBSTITUTING EQUIVALENTS KNOWN FOR THE SAME PURPOSE) and for providing a more precise control of the water temperature as recognized in Richmond. Re claim 2-5 and 7-10, to the have valves controlled as a function of various signals is deemed to be an obvious matter of design in view of the corresponding microcontroller in Japan'195, Korean'082, Richmond or Quandt. It is understood that the microcontrollers are programmable to control various components of operating systems with many possible control scenarios available and therefore, the operation/control of the valves in Japan'195, Korean'082, Richmond or Quandt are capable of functioning as claimed, if programmed as such. To have the controller program as specifically claimed is of little patentable weight.

Art Unit: 1746

APPARATUS CLAIMS MUST BE STRUCTURALLY DISTINGUISHABLE FROM THE PRIOR ART

>While features of an apparatus may be recited either structurally or functionally, claims<directed to >an< apparatus must be distinguished from the prior art in terms of structure rather than function. >In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429,1431-32 (Fed. Cir. 1997) (The absence of a disclosure in a prior art reference relating to function did not defeat the Board's finding of anticipation of claimed apparatus

function did not defeat the Board's finding of anticipation of claimed apparatus because the limitations at issue were found to be inherent in the prior art reference); see also In re Swinehart, 439 F.2d 210, 212–13, 169 USPQ 226, 228–29 (CCPA 1971); In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). [A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch &

Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original).

MANNER OF OPERATING THE DEVICE DOES NOT DIFFERENTIATE APPARATUS CLAIM FROM THE PRIOR ART

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987) (The preamble of claim 1 recited that the apparatus was "for mixing flowing developer material" and the body of the claim recited "means for mixing ..., said mixing means being stationary and completely submerged in the developer material". The claim was rejected over a reference which taught all the structural limitations of the claim for the intended use of mixing flowing developer. However, the mixer was only partially submerged in the developer material. The Board held that the amount of submersion is immaterial to the structure of the mixer and thus the claim was properly rejected.).

Re claim 11, Quandt discloses the independent sensors. Re claim 12, to have the sensors provided with multiple trips points is considered to be an obvious extension of

Art Unit: 1746

the teachings of Japan'195, Korean'082, Richmond or Quandt and a mere substitution of equivalents.

3. Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection. However in regard to the remarks on the Quandt, namely that the same merely discloses the a plurality of sensors to compute an average fill rate, while this is true, the same is not believed to be a complete description of the Quandt reference. Note that Quandt also discloses (col. 5, lines 20-26) the following:

to that level. Measurements may also be taken between sensors 56a-e. A plurality of measurements may be taken on each fill operation, or over a plurality of fill operations to arrive at an average fill rate FR which is used to update register 54. Registers 40, 44, and 54 may typically take the form of software storage locations where T_C , T_W , and FR are stored.

And in regard to "T_c" and "T_w" values, note that Quandt discloses (col. 4, lines 42-64, that these values are delivered to the registers 40, and 44 and are thusly read by the controller (36) to sequentially control the operation the valves (46, 48) to control the temperature of the water. Therefore, it is the examiner's position that in Quandt, the temperature of the water is also controlled by the pressure values store in the registers 40, 44 as detected by the sensors 56a-e as read by the controller (36).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In Japan'394 and Honda, note the control means.

Art Unit: 1746

(571) 272-1308. The examiner can normally be reached on M-F from 5:30 am to 2:00

pm and some Saturdays from approximately 5:30 am to 11:30 am.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr, can be reached on (571) 272-1700. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

fls

FRANKIE L. STINSON Primary Examiner Page 6

GROUP ART UNIT 1746